

# ALBERT EINSTEIN

## PLAGIARIST OF THE CENTURY

*Einstein plagiarised the work of several notable scientists in his 1905 papers on special relativity and  $E = mc^2$ , yet the physics community has never bothered to set the record straight in the past century.*

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### Abstract

Proponents of Einstein have acted in a way that appears to corrupt the historical record. Albert Einstein (1879–1955), *Time Magazine's* "Person of the Century", wrote a long treatise on special relativity theory (it was actually called "On the Electrodynamics of Moving Bodies", 1905a), without listing any references. Many of the key ideas it presented were known to Lorentz (for example, the Lorentz transformation) and Poincaré before Einstein wrote the famous 1905 paper.

As was typical of Einstein, he did not discover theories; he merely commandeered them. He took an existing body of knowledge, picked and chose the ideas he liked, then wove them into a tale about his contribution to special relativity. This was done with the full knowledge and consent of many of his peers, such as the editors at *Annalen der Physik*.

The most recognisable equation of all time is  $E = mc^2$ . It is attributed by convention to be the sole province of Albert Einstein (1905). However, the conversion of matter into energy and energy into matter was known to Sir Isaac Newton ("Gross bodies and light are convertible into one another...", 1704). The equation can be attributed to S. Tolver Preston (1875), to Jules Henri Poincaré (1900; according to Brown, 1967) and to Olinto De Pretto (1904) before Einstein. Since Einstein never correctly derived  $E = mc^2$  (Ives, 1952), there appears nothing to connect the equation with anything original by Einstein.

Arthur Eddington's selective presentation of data from the 1919 Eclipse so that it supposedly supported "Einstein's" general relativity theory is surely one of the biggest scientific hoaxes of the 20th century. His lavish support of Einstein corrupted the course of history. Eddington was less interested in testing a theory than he was in crowning Einstein the king of science.

The physics community, unwittingly perhaps, has engaged in a kind of fraud and silent conspiracy; this is the byproduct of simply being bystanders as the hyperinflation of Einstein's record and reputation took place. This silence benefited anyone supporting Einstein.

### Introduction

Science, by its very nature, is insular. In general, chemists read and write about chemistry, biologists read and write about biology, and physicists read and write about physics. But they may all be competing for the same research dollar (in its broadest sense). Thus, if scientists wanted more money for themselves, they might decide to compete unfairly. The way they can do this is convince the funding agencies that they are more important than any other branch of science. If the funding agencies agree, it could spell difficulty for the remaining sciences. One way to get more money is to create a superhero—a superhero like Einstein.

Einstein's standing is the product of the physics community, his followers and the media. Each group benefits enormously by elevating Einstein to icon status. The physics community receives billions in research grants, Einstein's supporters are handsomely rewarded, and media corporations like *Time Magazine* get to sell millions of magazines by placing Einstein on the cover as "Person of the Century".

When the scandal breaks, the physics community, Einstein's supporters and the media will attempt to downplay the negative news and put a positive spin on it. However, their efforts will be shown up when Einstein's paper, "On the Electrodynamics of Moving Bodies", is seen for what it is: the consummate act of plagiarism in the 20th century.

## Special Relativity

Jules Henri Poincaré (1854–1912) was a great scientist who made a significant contribution to special relativity theory. The Internet Encyclopedia of Philosophy website says that Poincaré: (1) "sketched a preliminary version of the special theory of relativity"; (2) "stated that the velocity of light is a limit velocity" (in his 1904 paper from the *Bull. of Sci. Math.* 28, Poincaré indicated "a whole new mechanics, where the inertia increasing with the velocity of light would become a limit and not be exceeded"); (3) suggested that "mass depends on speed"; (4) "formulated the principle of relativity, according to which no mechanical or electromagnetic experiment can discriminate between a state of uniform motion and a state of rest"; and (5) "derived the Lorentz transformation".

It is evident how deeply involved with special relativity Poincaré was. Even Keswani (1965) was prompted to say that "As far back as 1895, Poincaré, the innovator, had conjectured that it is impossible to detect absolute motion", and that "In 1900, he introduced 'the principle of relative motion' which he later called by the equivalent terms 'the law of relativity' and 'the principle of relativity' in his book, *Science and Hypothesis*, published in 1902". Einstein acknowledged none of this preceding theoretical work when he wrote his unreferenced 1905 paper.

In addition to having sketched the preliminary version of relativity, Poincaré provided a critical part of the whole concept—namely, his treatment of local time. He also originated the idea of clock synchronisation, which is critical to special relativity.

Charles Nordman was prompted to write, "They will show that the credit for most of the things which are currently attributed to Einstein is, in reality, due to Poincaré", and "...in the opinion of the Relativists it is the measuring rods which create space, the clocks which create time. All this was known by Poincaré and others long before the time of Einstein, and one does injustice to truth in ascribing the discovery to him".

Other scientists have not been quite as impressed with "Einstein's" special relativity theory as has the public. "Another curious feature of the now famous paper, Einstein, 1905, is the absence of any reference to Poincaré or anyone else," Max Born wrote in *Physics in My Generation*. "It gives you the impression of quite a new venture. But that is, of course, as I have tried to explain, not true" (Born, 1956). G. Burniston Brown (1967) noted, "It will be seen that, contrary to popular belief, Einstein played only a minor part in the derivation of the useful formulae in the restricted or special relativity theory, and Whittaker called it the relativity theory of Poincaré and Lorentz..."

Due to the fact that Einstein's special relativity theory was known in some circles as the relativity theory of Poincaré and Lorentz, one would think that Poincaré and Lorentz might have had something to do with its creation. What is disturbing about the Einstein paper is that even though Poincaré was the world's leading expert on relativity, apparently Einstein had never heard of him or thought he had done anything worth referencing!

Poincaré, in a public address delivered in September 1904, made some notable comments on special relativity theory. "From all these results, if they are confirmed, would arise an entirely new mechanics... would be, above all, characterised by

this fact that no velocity could surpass that of light...because bodies would oppose an increasing inertia to the causes, which would tend to accelerate their motion; and this inertia would become infinite when one approached the velocity of light... No more for an observer carried along himself in a translation, he did not suspect any apparent velocity could surpass that of light: and this would be then a contradiction, if we recall that this observer would not use the same clocks as a fixed observer, but, indeed, clocks marking 'local time'." (Poincaré, 1905)

## Einstein, the Plagiarist

It is now time to speak directly to the issue of what Einstein was: he was first and foremost a plagiarist. He had few qualms about stealing the work of others and submitting it as his own. That this was deliberate seems obvious.

Take this passage from Ronald W. Clark, *Einstein: The Life and Times* (there are no references to Poincaré here; just a few meaningless quotes). This is how page 101 reads: "'On the Electrodynamics of Moving Bodies'...is in many ways one of the most remarkable scientific papers that had ever been written. Even in form and style it was unusual, *lacking the notes and references which give weight to most serious expositions ...*" (emphasis added).

Why would Einstein, with his training as a patent clerk, not recognise the need to cite references in his article on special relativity? One would think that Einstein, as a neophyte, would *overreference* rather than underreference.

Wouldn't one also expect somewhat higher standards from an editor when faced with a long manuscript that had obviously not been credited? Apparently there was no attempt at quality control when it was published in *Annalen der Physik*. Most competent editors would have rejected the paper

without even reading it. At the barest minimum, one would expect the editor to research the literature to determine whether Einstein's claim of primacy was correct.

Max Born stated, "The *striking* point is that it contains not a single reference to previous literature" (emphasis added) (Born, 1956). He is clearly indicating that the absence of references is abnormal and that, even by early 20th century standards, this is most peculiar, even unprofessional.

Einstein twisted and turned to avoid plagiarism charges, but these were transparent.

From Bjerknes (2002), we learn the following passage from James MacKaye: "Einstein's explanation is a dimensional disguise for Lorentz's... Thus Einstein's theory is not a denial of, nor an alternative for, that of Lorentz. It is only a duplicate and disguise for it... Einstein continually maintains that the theory of Lorentz is right, only he disagrees with his 'interpretation'. Is it not clear, therefore, that in this [case], as in other cases, Einstein's theory is merely a disguise for Lorentz's, the apparent disagreement about 'interpretation' being a matter of words only?"

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Yet many of Poincaré's ideas—for example, that the speed of light is a limit and that mass increases with speed—wound up in Einstein's paper, "On the Electrodynamics of Moving Bodies" without being credited.

Einstein's act of stealing almost the entire body of literature by Lorentz and Poincaré to write his document raised the bar for plagiarism. In the information age, this kind of plagiarism could never be perpetrated indefinitely, yet the physics community has still not set the record straight.

In his 1907 paper, Einstein spelled out his views on plagiarism: "It appears to me that it is the nature of the business that what follows has already been partly solved by other authors. Despite that fact, since the issues of concern are here addressed from a new point of view, I am entitled to leave out a thoroughly pedantic survey of the literature..."

With this statement, Einstein declared that plagiarism, suitably packaged, is an acceptable research tool.

Here is the definition of "to plagiarise" from an unimpeachable source, *Webster's New International Dictionary of the English Language*, Second Edition, Unabridged, 1947, p. 1,878: "To steal or purloin and pass off as one's own (the ideas, words, artistic productions, etc. of one another); *to use without due credit the ideas, expressions or productions of another*. To commit plagiarism" (emphasis added). Isn't this exactly what Einstein did?

Giving due credit involves two aspects: timeliness and appropriateness. Telling the world that Lorentz provided the basis for special relativity 30 years after the fact is not timely (see below), is not appropriate and is not giving due credit. Nothing Einstein wrote *ex post facto* with respect to Lorentz's contributions alters the fundamental act of plagiarism.

The true nature of Einstein's plagiarism is set forth in his 1935 paper, "Elementary Derivation of the Equivalence of Mass and Energy", where, in a discussion on Maxwell, he wrote, "The question as to the independence of those relations is a natural one because the *Lorentz transformation, the real basis of special relativity theory...*" (emphasis added).

So, Einstein even acknowledged that the Lorentz transformation was the real basis of his 1905 paper. Anyone who doubts that he was a plagiarist should ask one simple question: "What did Einstein know and when did he know it?" Einstein got away with premeditated plagiarism, not the incidental plagiarism that is ubiquitous (Moody, 2001).

### The History of $E = mc^2$

Who originated the concept of matter being transformed into energy and vice versa? It dates back at least to Sir Isaac Newton (1704). Brown (1967) made the following statement: "Thus gradually arose the formula  $E = mc^2$ , suggested without general proof by Poincaré in 1900".

One thing we can say with certainty is that Einstein did not originate the equation  $E = mc^2$ .

Then the question becomes: "Who did?"

Bjerknes (2002) suggested as a possible candidate S. Tolver Preston, who "formulated atomic energy, the atom bomb and superconductivity back in the 1870s, based on the formula  $E = mc^2$ ".

In addition to Preston, a major player in the history of  $E = mc^2$  who deserves a lot of credit is Olinto De Pretto (1904). What makes this timing so suspicious is that Einstein was fluent in Italian, he was reviewing papers written by Italian physicists and his best friend was Michele Besso, a Swiss Italian. Clearly, Einstein (1905b) would have had access to the literature and the competence to read it. In "Einstein's  $E = mc^2$  'was Italian's idea'" (Carroll, 1999), we see clear evidence that De Pretto was ahead of Einstein in terms of the formula  $E = mc^2$ .

In terms of his understanding the vast amount of energy that could be released with a small amount of mass, Preston (1875) can be credited with knowing this before Einstein was born. Clearly, Preston was using the  $E = mc^2$  formula in his work, because the value he determined—e.g., that one grain could lift a 100,000-ton object up to a height of 1.9 miles—yields the equation  $E = mc^2$ .

According to Ives (1952), the derivation Einstein attempted of the formula  $E = mc^2$  was fatally flawed because Einstein set out to prove what he assumed. This is similar to the careless handling of the equations for radioactive decay which Einstein derived. It turns out that Einstein mixed kinematics and mechanics, and out popped the neutrino. The neutrino may be a mythical particle accidentally created by Einstein (Carezani, 1999). We have two choices with respect to neutrinos: there are at least 40 different types or there are zero types. Occam's razor rules here.

### The Eclipse of 1919

There can be no clearer definition of scientific fraud than what went on in the Tropics on May 29, 1919. What is particularly clear is that Eddington fudged the solar eclipse data to make the results conform to "Einstein's" work on general

relativity. Poor (1930), Brown (1967), Clark (1984) and McCausland (2001) all address the issues surrounding this eclipse.

What makes the expeditions to Sobral and Principe so suspect is Eddington's zealous support of Einstein, as can be seen in his statement, "By standing foremost in testing, and ultimately *verifying* the 'enemy' theory, our national observatory kept alive the finest traditions of science..." (emphasis added) (Clark, 1984). In this instance, apparently Eddington was not familiar with the basic tenets of science. His job was to collect data—*not* verify Einstein's theories.

Further evidence for the fraud can be deduced from Eddington's own statements and the introduction to them provided by Clark (*ibid.*, p. 285): "May 29 began with heavy rain, which stopped only about noon. Not until 1.30 pm when the eclipse had already begun did the party get its first glimpse of the sun: 'We had to carry out our programme of photographs *on faith...*'" (emphasis added). Eddington reveals his true prejudice: he was willing to do anything to see that Einstein was proved

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right. But Eddington was not to be deterred: "It looked as though the effort, so far as the Principe expedition was concerned, might have been abortive"; "We developed the photographs, two each night for six nights after the eclipse... The cloudy weather upset my plans and *I had to treat the measures in a different way from what I intended; consequently I have not been able to make any preliminary announcement of the result*" (emphasis added) (Clark, *ibid.*).

Actually, Eddington's words speak volumes about the result. As soon as he found one shred of evidence that was consistent with "Einstein's" general relativity theory, he immediately proclaimed it as proof of the theory. Is this science?

Where were the astronomers when Eddington presented his findings? Did anyone besides Eddington actually look at the photographic plates? Poor did, and he completely repudiated the findings of Eddington. This should have given pause to any ethical scientist.

Here are some quotes from Poor's summary: "The mathematical formula, by which Einstein calculated his deflection of 1.75 seconds for light rays passing the edge of the sun, is a well known and simple formula of physical optics"; "*Not a single one of the fundamental concepts* of varying time, or warped or twisted space, of simultaneity, or of the relativity of motion *is in any way involved in Einstein's prediction of, or formulas for, the deflection of light*"; "The many and elaborate eclipse expeditions have, therefore, been given a fictitious importance. *Their results can neither prove nor disprove the relativity theory...*" (emphasis added) (Poor, 1930).

From Brown (1967), we learn that Eddington couldn't wait to get it out to the world community that Einstein's theory was confirmed. What Eddington based this on was a premature assessment of the photographic plates. Initially, stars did "appear" to bend as they should, as required by Einstein, but then, according to Brown, the unexpected happened: several stars were then observed to bend in a direction transverse to the expected direction and still others to bend in a direction opposite to that predicted by relativity.

The absurdity of the data collected during the Eclipse of 1919 was demonstrated by Poor (1930), who pointed out that 85% of the data were discarded from the South American eclipse due to "accidental error", i.e., it contradicted Einstein's scale constant. By a strange coincidence, the 15% of the "good" data were consistent with Einstein's scale constant. Somehow, the stars that did not conform to Einstein's theories conveniently got temporarily shelved—and the myth began.

So, based on a handful of ambiguous data points, 200 years of theory, experimentation and observation were cast aside to make room for Einstein. Yet the discredited experiment by Eddington is still quoted as gospel by Stephen Hawking (1999). It is difficult to comprehend how Hawking could comment that "The new theory of curved space-time was called general relativity... It

was confirmed in spectacular fashion in 1919, when a British expedition to West Africa observed a slight shift in the position of stars near the sun during an eclipse. Their light, as Einstein had predicted, was bent as it passed the sun. Here was direct evidence that space and time were warped". Does Hawking honestly believe that a handful of data points, massaged more thoroughly than a side of Kobe beef, constitutes the basis for overthrowing a paradigm that had survived over two centuries of acid scrutiny?

The real question, though, is: "Where was Einstein in all this?" Surely, by the time he wrote his 1935 paper, he must have known of the work of Poor: "The actual stellar displacements, if real, do not show the slightest resemblance to the predicted Einstein deflections: they do not agree in direction, in size, or the rate of decrease with distance from the sun". Why didn't he go on the record and address a paper that directly contradicted his work? Why haven't the followers of Einstein tried to set the record straight with respect to the bogus data of 1919?

What makes this so suspicious is that both the instruments and the physical conditions were not conducive to making measurements of great precision. As pointed out in a 2002 Internet article by the British Institute of Precise Physics, the cap cameras used in the expeditions were accurate to only 1/25th of a degree. This meant that just for the cap camera uncertainty alone, Eddington was reading values over 200 times too precise.

McCausland (2001) quotes the former Editor of *Nature*, Sir John Maddox: "They [Crommelin and Eddington] were *bent on* measuring the deflection of light..."; "What is not so well documented is that *the measurements in 1919 were not particularly accurate*"; "In spite of the fact that experimental evidence for relativity seems to have been very flimsy in 1919, Einstein's enormous fame has remained intact and his theory has ever since been held to be one of the highest achievements of human thought" (emphasis added).

It is clear that from the outset Eddington was in no way interested in *testing* "Einstein's" theory; he was only interested in confirming it. One of the motivating factors in Eddington's decision to promote Einstein was that both men shared a similar political persuasion: pacifism.

To suggest that politics played no role in Eddington's glowing support of Einstein, one need ask only one question: "Would Eddington have been so quick to support Einstein if Einstein had been a hawk?" This is no idle observation. Eddington took his role as the great peacemaker very seriously. He wanted to unite British and German scientists after World War I. What better way than to elevate the "enemy" theorist Einstein to exalted status? In his zeal to become peacemaker, Eddington lost the fundamental objectivity that is the essential demeanour of any true scientist. Eddington ceased to be a scientist and, instead, became an advocate for Einstein.

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The obvious fudging of the data by Eddington and others is a blatant subversion of scientific process and may have misdirected scientific research for the better part of a century. It probably surpasses the Piltdown Man as the greatest hoax of 20th-century science. The BIPP asked, "Was this the hoax of the century?" and exclaimed, "Royal Society 1919 Eclipse Relativity Report Duped World for 80 Years!" McCausland stated that "In the author's opinion, the confident announcement of the decisive confirmation of Einstein's general theory in November 1919 was not a triumph of science, as it is often portrayed, but one of the most unfortunate incidents in the history of 20th-century science".

It cannot be emphasised enough that the Eclipse of 1919 made Einstein, Einstein. It propelled him to international fame overnight, despite the fact that the data were fabricated and there was no support for general relativity whatsoever. This perversion of history has been known about for over 80 years and is still sup-

ported by people like Stephen Hawking and David Levy.

### Summary and Conclusions

The general public tends to believe that scientists are the ultimate defenders of ethics, that scientific rigour is the measure of truth. Little do people realise how science is conducted in the presence of personality.

It seems that Einstein believed he was above scientific protocol. He thought he could bend the rules to his own liking and get away with it; hang in there long enough and his enemies would die off and his followers would win the day. In science, the last follower standing wins—and gets to write history. In the case of Einstein, his blatant and repeated dalliance with plagiarism is all but forgotten and his followers have borrowed repeatedly from the discoveries of other scientists and used them to adorn Einstein's halo.

Einstein's reputation is supported by a three-legged stool. One leg is Einstein's alleged plagiarism. Was he a plagiarist? The second leg is the physics community. What did they know about Einstein and when did they know it? The third leg is

the media. Are they instruments of truth or deception when it comes to Einstein? Only time will tell.

The physics community is also supported by a three-legged stool. The first leg is Einstein's physics. The second leg is cold fusion. The third leg is autodynamics. The overriding problem with a three-legged stool is that if only one leg is sawed off, the stool collapses. There are at least three very serious disciplines where it is predictable that physics may collapse.

Science is a multi-legged stool. One leg is physics; a second leg is the earth sciences; a third, biology; and a fourth, chemistry (e.g., cold fusion). What will happen if, for the sake of argument, physics collapses? Will science fall?

### References

- Bjerknes, C.J. (2002), *Albert Einstein: The Incurable Plagiarist*, XTX Inc., Dowers Grove.
- Born, M. (1956), *Physics in My Generation*, Pergamon Press, London, p. 193.
- Brown, G. Burniston (1967), "What is wrong with relativity?", *Bull. of the Inst.*

of *Physics and Physical Soc.*, pp. 71-77.

- Carezani, R. (1999), *Autodynamics: Fundamental Basis for a New Relativistic Mechanics*, SAA, Society for the Advancement of Autodynamics.
- Carroll, R., "Einstein's  $E = mc^2$  'was Italian's idea'", *The Guardian*, November 11, 1999.
- Clark, R.W. (1984), *Einstein: The Life and Times*, Avon Books, New York.
- De Pretto, O. (1904), "Ipotesi dell'etere nella vita dell'universo", *Reale Istituto Veneto di Scienze, Lettere ed Arti*, Feb. 1904, tomo LXIII, parte II, pp. 439-500.
- Einstein, A. (1905a), "Zur Elektrodynamik bewegter Körper" ("On the Electrodynamics of Moving Bodies"), *Annalen der Physik* 17:37-65.
- Einstein, A. (1905b), "Does the Inertia of a Body Depend on its Energy Content?", *Annalen der Physik* 18:639-641.
- Einstein, A. (1907), "Über die vom Relativitätsprinzip geforderte Trägheit der Energie", *Annalen der Physik* 23(4):371-384 (quote on p. 373).
- Einstein, A. (1935), "Elementary Derivation of the Equivalence of Mass

- and Energy", *Bull. Amer. Math. Soc.* 61:223-230 (first delivered as The Eleventh Josiah Willard Gibbs Lecture at a joint meeting of the American Physical Society and Section A of the AAAS, Pittsburgh, December 28, 1934).
- Hawking, S., "Person of the Century", *Time Magazine*, December 31, 1999.
- Ives, H.E. (1952), "Derivation of the Mass-Energy Relation", *J. Opt. Soc. Amer.* 42:540-543.
- Keswani, G.H. (1965), "Origin and Concept of Relativity", *Brit. J. Phil. Soc.* 15:286-306.
- Mackaye, J. (1931), *The Dynamic Universe*, Charles Scribner's Sons, New York, pp. 42-43.
- Maddox, J. (1995), "More Precise Solar-limb Light-bending", *Nature* 377:11.
- Moody, R., Jr (2001), "Plagiarism Personified", *Mensa Bull.* 442(Feb):5.
- Newton, Sir Isaac (1704), *Opticks*, Dover Publications, Inc., New York, p. cxv.
- Nordman, C. (1921), *Einstein et l'univers*, translated by Joseph McCabe as "Einstein and the Universe", Henry Holt and Co., New York, pp. 10-11, 16 (from Bjerknes, 2002).

- Poincaré, J.H. (1905), "The Principles of Mathematical Physics", *The Monist*, vol. XV, no. 1, January 1905; from an address delivered before the International Congress of Arts and Sciences, St Louis, September 1904.
- Poor, C.L. (1930), "The Deflection of Light as Observed at Total Solar Eclipses", *J. Opt. Soc. Amer.* 20:173-211.
- *The Internet Encyclopedia of Philosophy*, Jules Henri Poincaré (1854-1912), at <http://www.utm.edu/research/iep/p/poincare.htm>.
- Webster, N. (1947), *Webster's New International Dictionary of the English Language*, Second Edition, Unabridged, p. 1878.

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